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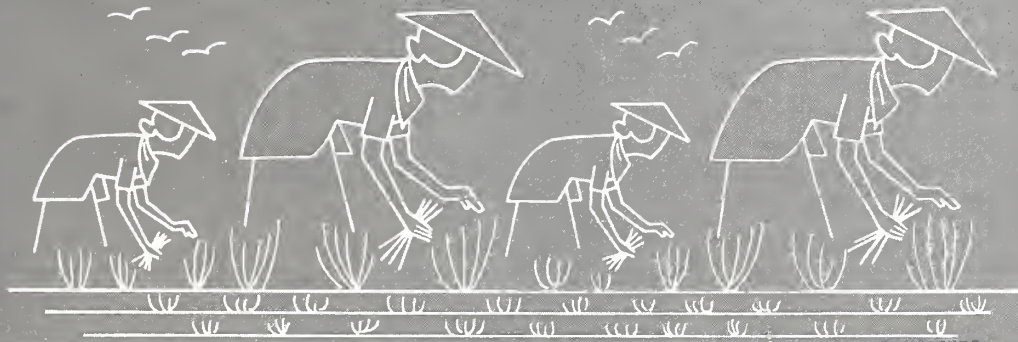
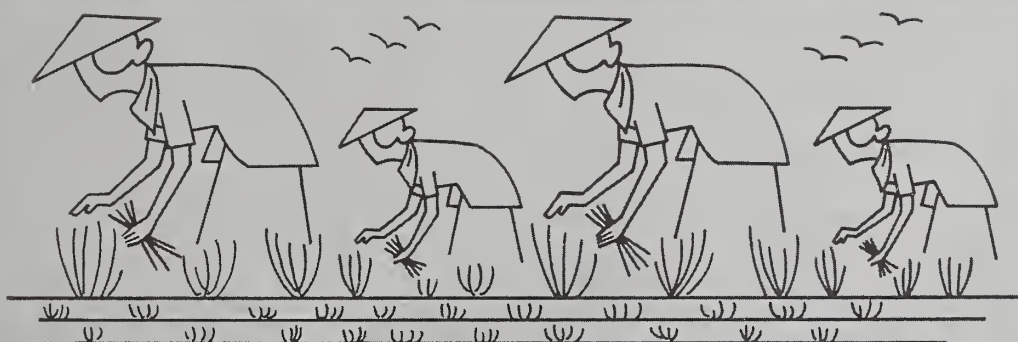
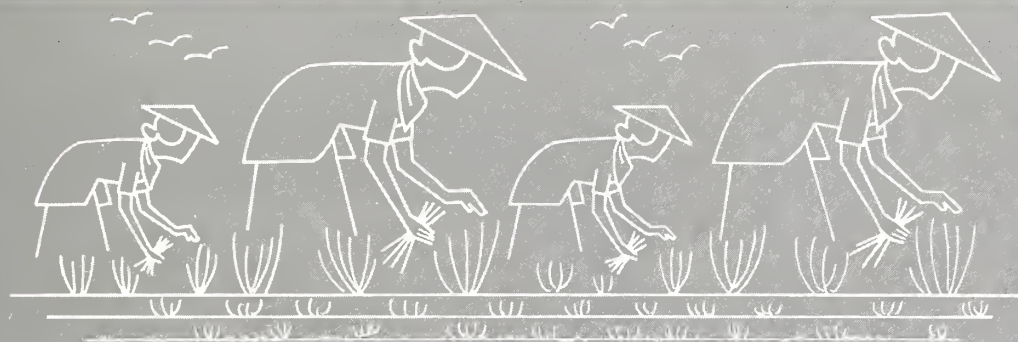
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FOREIGN AGRICULTURE

March 9, 1970



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CURRENT SERIAL RECORDS

U.S. Rice in World Trade

Review of Danish Agriculture

Philippine Farm Trends

Foreign
Agricultural
Service
U.S. DEPARTMENT
OF AGRICULTURE

By ROBERT A. BIEBER and JOHN T. HOPKINS
Grain and Feed Division, FAS

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This week's cover:

Rice—the chief sustenance for more than a third of the world's population—experienced rapid changes in yields, production, prices, consumption, exports, and imports during the 1960's. For the full story see article beginning this page.

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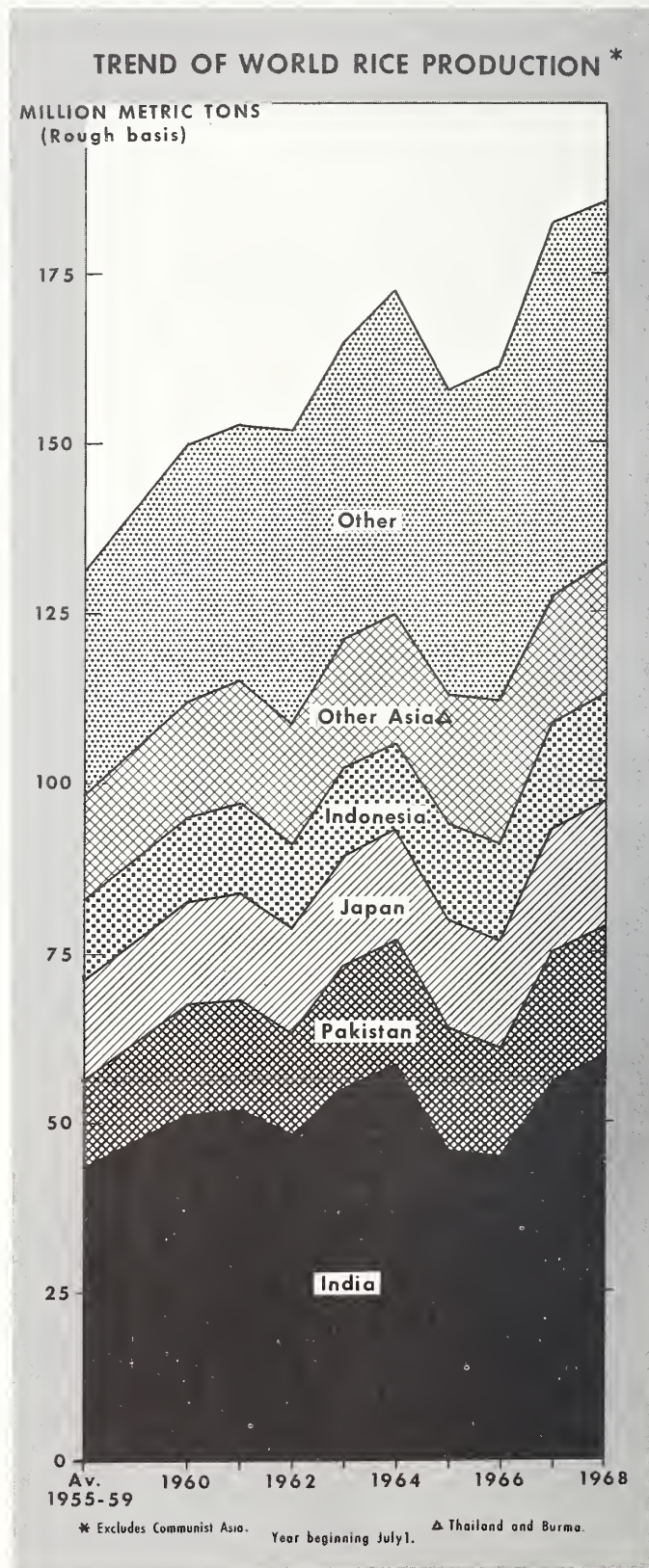
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U.S. Rice in World Trade

The decade of the 1960's was a time of rapid change in almost every aspect of the world rice situation—yields, production, prices, consumption, exports, and imports. Nothing stayed the same except that rice remained, as it has been for more than 5,000 years, the chief sustenance for more than a third of the world's population.

Perhaps the most striking change was in world production, which took an upward leap of 30 percent. This production upsurge has altered the shape of world trade in rice. It has reduced the import needs of a number of importing countries, even turning some of them into minor exporters; and in so doing it has diminished traditional markets for Burma, Mainland China, and Thailand—which, in that order, had opened the decade as the world's top exporters.

The United States, on the other hand, climbed from fourth to first place among the major exporters, with a steady increase in the number of its commercial markets and in the amount of its export sales—especially those for dollars.

The production boom

World rice output underwent some steep fluctuations during the decade—a state of affairs that is by no means unknown for this weather-sensitive grain. More than 90 percent of the world's rice is grown and consumed in Asia, where for centuries the size of much of the rice crop has depended on the timely arrival of the monsoon rains.

The 1960's, however, seem to have witnessed a major boost in the whole level of world rice production. As the decade opened, world rice production (excluding Communist

Asia—China, North Korea, and North Vietnam) stood at 150 million metric tons of paddy for the crop year beginning July 1, 1960. This was already well above the average of 131 million for the preceding 5 years. And, even with the monsoon failures of 1965 and 1966, the 10-year average for the 1960's was 168 million tons—far above the 1950-59 average, which was 122 million, and nearly one-fifth above the 143-million-ton record for the 1950's.

World rice output reached a new record of 183 million tons in 1967-68 and another of 186 million in 1968-69; and it has been estimated at a third of 195 million for 1969-70. This production growth during the 1960's is partly the result of slight acreage increases in some countries. To a far greater extent, however, it is due to the use of better, higher yielding varieties and to increases in the utilization of fertilizers, insecticides, pesticides, and irrigation.

A major breakthrough in rice production came with the widespread adoption in the late 1960's of the "miracle rice"—IR-8, a high-yielding variety, one of those developed by the International Rice Research Institute at Los Banos, Philippine Republic. A number of countries have realized remarkable production gains through the use of the new varieties and through general improvement in their rice-growing practices. The Philippines, for example, has become self-sufficient in rice, reducing its import requirements from 300-400,000 tons per year to zero. And Pakistan, among other countries, has found its western area quite adaptable to this new variety; West Pakistan's total production has increased from 2.2 million tons to 3.1 million.

The new rice varieties have not, of course, solved all problems. In their early stages, they have had some disadvantages both for growers and for traders (consumers, especially in Asia, still tend to prefer the kinds of rice they have always eaten). But development continues, and still newer varieties are expected to overcome most objections.

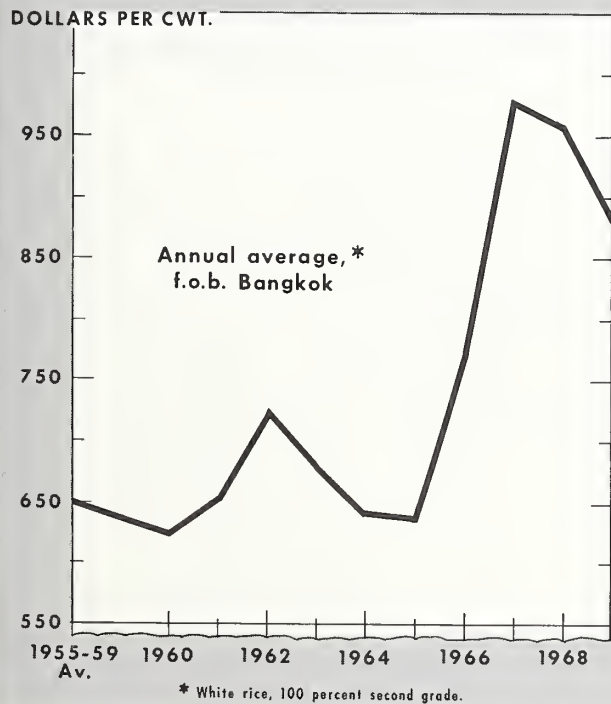
The trade shift

It should be remembered that less than 4 percent of all the rice produced in the world finds its way into export channels. The world's major producing countries—all in Asia—ordinarily consume all the rice their farmers can grow and still need to import more. An exception—even in bad years—is Mainland China, which despite the great size of its domestic demand always reserves some rice for export, to finance imports of needed items such as wheat.

World trade, then, is not necessarily correlated with world production; for the major countries (except Mainland China) are not the major producers. During the 1960's total trade fluctuated around 7 million tons a year (milled basis), with a high of 7.9 million in calendar 1965 and a low of 6.2 million in calendar 1968. These fluctuations were due primarily to shortages created by weather not only in the importing countries but also in the exporting countries. In years when more rice was available in exporting countries, more moved into export channels. In calendar 1965, for example, the record level of world trade was primarily due to large increases in world paddy production in 1963-64 and 1964-65.

The production boom of the 1960's has not enlarged the total amount of world rice trade, but the pattern of that trade

TREND OF RICE PRICES



has markedly changed. This is clearly shown by the fortunes of the four exporters that stood highest in 1960.

Burma, the leading exporter for the first 4 years, was outstripped in 1964 by Thailand; in 1965, by both Thailand and the United States; in the next 4 years, by all three of the other major contenders. By 1968, Burma's exports had fallen to 335,000 metric tons (milled). For 1969, they are estimated to have risen to 600,000.

Mainland China stood second in 1960; but its Great Leap Forward, coinciding with disastrous weather, wrought severe damage to its food supplies, and only toward the end of the decade did it regain second place as a world rice exporter. For 1969, it is estimated to have moved to third.

Thailand, in most years of the decade, has run a very close second to the top exporter, and it took top place itself in 1964 and 1965. But a production slump in 1967 made it necessary for the Thais to put an export ban on rice in the latter part of that year and in early 1968; and their traditional customers had to look elsewhere to fill domestic needs. An example of the effect of this ban was that importers from Hong Kong, Singapore, and Malaysia turned to the United States for 100,000 tons of rice formerly furnished by Thailand. A further small export decline is estimated for 1969.

During the decade, three other countries—South Vietnam, Japan, and the United Arab Republic (Egypt)—also underwent pronounced trade shifts. South Vietnam, which normally exported in the neighborhood of 350,000 tons of milled rice, became a large importer, requiring around 650,000 tons in 1968. This shift to the import side affected the pattern of world trade, for the former exports and the large new import needs of South Vietnam together add up to a million metric tons, about 14 percent of the 7 million tons that move in world markets. These new import needs and the reduction in Thai export availabilities were the main reasons for the 20-percent increase in U.S. rice acreage in 1968.

Japan has traditionally been a large rice importer; in 1965, its imports reached a peak of 967,000 tons. But Japan has increased its own production so much that it now has surplus rice and is no longer a sizable commercial market.

The United Arab Republic entered the export market in quantity for the first time in the middle 1960's. In 1968 it moved ahead of Burma to become the No. 4 exporter, with shipments reaching 570,000 tons—nearly twice as much as in 1960. Its exports in 1969 may have run a little closer to 600,000 tons—about even with those forecast for Burma.

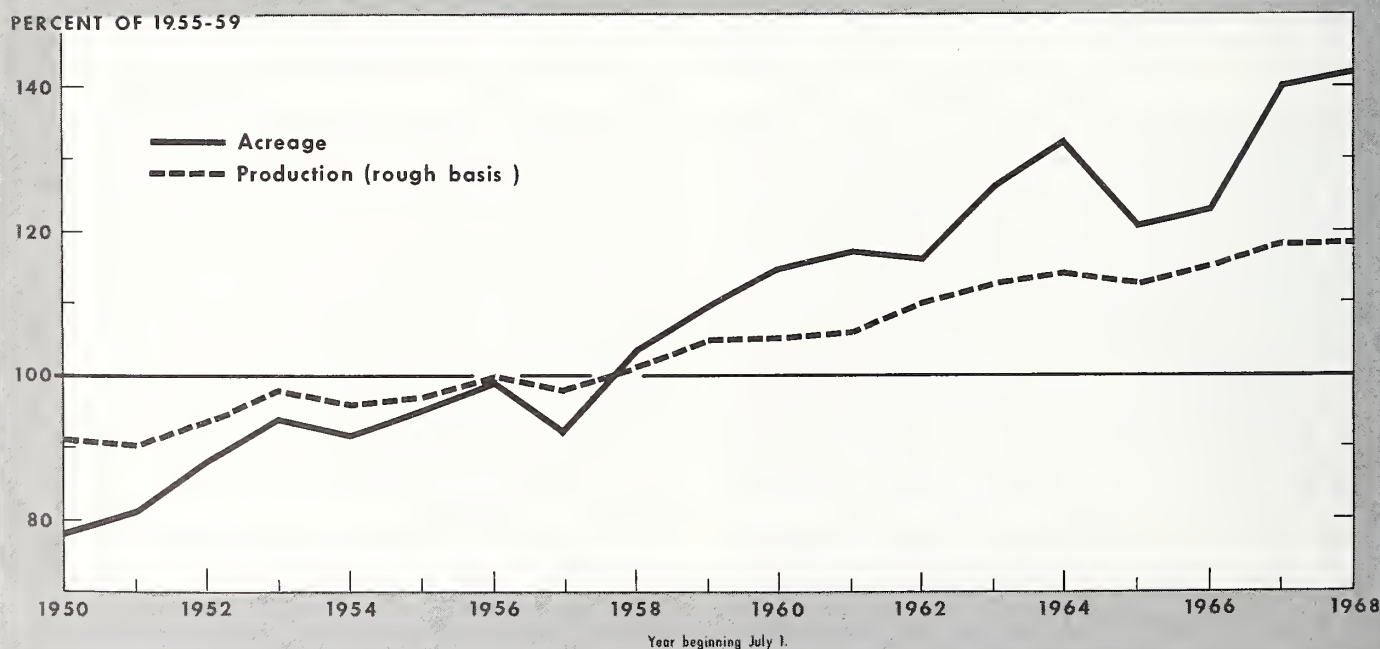
The trend of U.S. exports

The United States entered the decade faced with the loss of its market in Cuba, which during the late 1950's had been importing close to 200,000 tons of U.S. rice. Energetic market development efforts by the U.S. rice industry, however, soon began to pay off. Total exports (more than half for dollars) reached 1.4 million tons in the marketing year ending July 31, 1964, even with exports to Cuba at zero. Total exports continued to show an annual increase, peaking at over 1.8 million tons in 1967-68, falling only slightly lower in 1968-69, and estimated as remaining close to the same level in 1969-70. This level is about three times that of 1958.

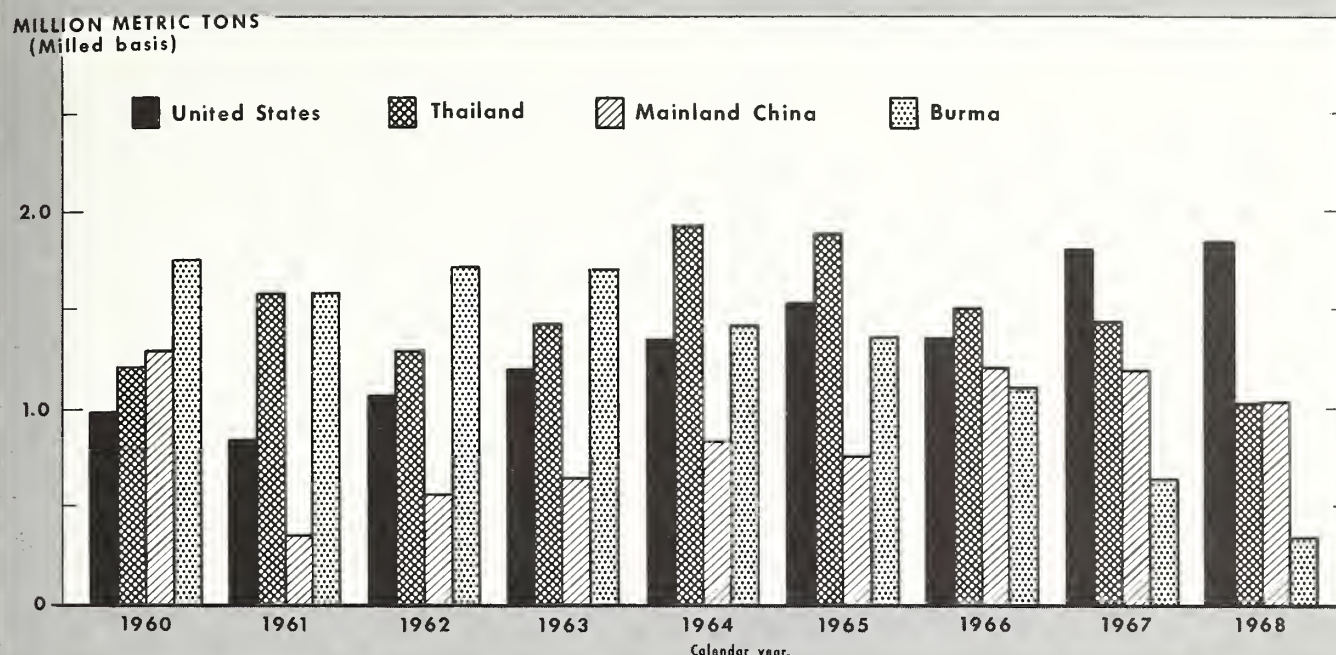
During the early years of the decade, exports under concessional terms varied from a high of 663,000 tons to a low of 418,000. After 1966, because of the Vietnamese conflict and the necessity of supplying large quantities of rice to South Vietnam, concessional sales increased. There has been a phenomenal increase in cash sales of U.S. rice on world markets during the decade. From 301,000 tons in 1960-61, they rose to 1,131,000 in 1967-68—almost four times the amount of U.S. rice exported for dollars in 1960-61.

This steady annual increase in dollar sales came to a halt in 1968-69, when these sales dropped to 840,000 tons from the previous year's alltime high. Yet total U.S. rice exports

WORLD RICE PRODUCTION HAS OUTPACED ACREAGE



WORLD'S MAJOR RICE EXPORTERS HAVE SHIFTED POSITIONS



in 1968-69 were approximately the same as the year before—around 1.8 million tons. The loss in dollar exports was compensated for by an increase in the quantity of rice moving under concessional sales—a record 997,000 tons.

The U.S. market development effort

On the basis of surveys carried out in the late 1950's, the rice industry's promotional arm, the U.S. Rice Export Development Association, opened the 1960's with programs in England, Germany, Switzerland, Belgium, the Netherlands, South Africa, and Scandinavia. These programs, carried out by local home economists, included participation in international trade fairs, school and institutional campaigns, and press services, to demonstrate the economy, ease of cooking, and versatility of U.S. long grain rice as a vegetable.

In 1964, the Export Development Association was merged with the Rice Council for Market Development, to increase activities leading to broad-based advertising efforts aimed at interesting large numbers of foreign consumers in American

rice. The overseas offices and the promotional activities of the Rice Council were financed as a joint venture with USDA's Foreign Agricultural Service. In addition to the activities of the offices, trade missions composed of industry and government officials traveled throughout the world seeking out potential markets.

Three main points of emphasis have been used by the American rice milling industry in its search for new export outlets. The first is the need of working with established trade organizations and people who know the country, the market, and the details of doing business with their established customers. The second is the need of creating consumer demand for rice in general: of arousing in the consumers—whatever their language or habitat—the desire to use rice instead of other carbohydrate foods customarily eaten. In those countries where rice is already a part of the eating pattern, rice demand is stimulated by showing the consumer how attractively and effectively rice can be served in new ways.

The third major point emphasized is the need of creating consumer demand for American rice in particular. This involves creating awareness that such a product is available at local retail shops and has features that make it attractive for the housewife. This last point has been the real key to building markets for American rice; it has led to the maintenance of good working relationships with established customers by providing consistent consumer demand.

The payoff from the 10-year effort of the rice industry, the U.S. Government, and the U.S. exporter has been a significant broadening of the world market for U.S. rice, not only in quantities sold but in areas covered. During the late 1950's, only about 35 countries were purchasing rice from the United States for dollars; but in 1969, U.S. high-quality rice was being exported to about 110 countries.

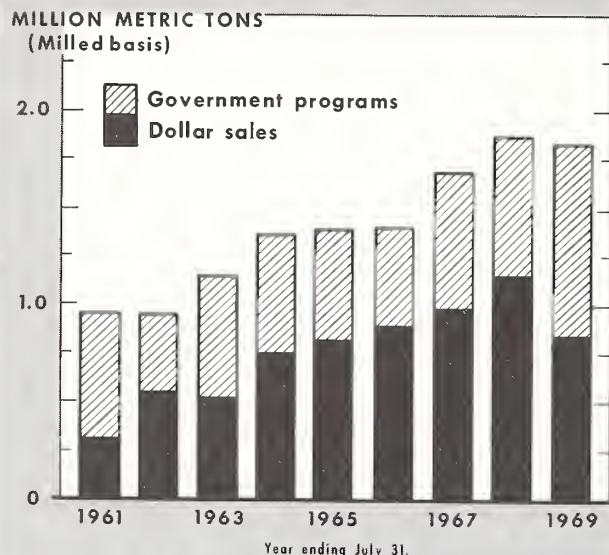
Looking ahead into the 1970's, we find that in contrast to the situation existing at the beginning of this decade,

U.S. RICE EXPORTS UNDER P.L. 480,
FISCAL YEARS 1966-69, BY MAJOR DESTINATIONS

Destination	Year ending July 31 —			
	1966	1967	1968	1969
	Metric tons, milled	Metric tons, milled	Metric tons, milled	Metric tons, milled
Korea	—	—	—	351,235
Indonesia	46,775	53,016	149,127	345,135
Vietnam	233,037	644,594	577,388	182,395
India	—	—	—	99,338
Congo	35,086	19,284	7,751	—
Philippines	35,074	—	—	—
Others	179,440	2,060	¹ 14,100	² 18,629
Total	529,412	718,954	748,366	996,732

¹ Of which 9,931 to Ghana and 4,357 to Liberia. ² Of which 15,444 to Guinea; 8,923 to Nigeria; 4,545 to Senegal; 2,908 to Chile.

U.S. RICE EXPORTS—FOR DOLLARS AND UNDER GOVERNMENT PROGRAMS



world rice production has increased by about 45 million tons, and import requirements are declining in a number of countries. Several of these countries are even finding themselves with small exportable surpluses, produced at high cost and thus necessitating export subsidies.

It is extremely difficult to predict with any certainty in just what direction world rice trade will go during the coming decade. If production increases continue and more countries become self-sufficient in rice, it is not likely that there will be an increase in the amount of rice entering world trade. There will undoubtedly be further breakthroughs in rice variety production, and the IRRI types will be supplemented by varieties more acceptable to consumers.

Many countries, however, are working not only toward reaching self-sufficiency but toward entering export markets. The question is, who will then become the importer? If production does increase, prices in the next decade should not only stabilize but be reduced somewhat. In any event, there should be adequate world commercial markets for high-quality U.S. rice—many of them the outgrowth of the U.S. rice industry's own marketing efforts during the 1960's. The shape of world trade in rice during the 1970's may well depend on the competition for these new dollar markets.

Canadian Government Proposes Wheat Acreage Reduction

A program for the drastic reduction of wheat acreage this year was outlined on February 27 to Canada's House of Commons by Otto E. Lang (Minister Responsible for the Canadian Wheat Board). If successfully completed, it could remove from production as much as 22 million acres of wheatland, compared with the nearly 25 million seeded in 1969.

Mr. Lang told the House that Canada's wheat carryover would be approximately 950 million bushels on July 31—nearly 2 years' disappearance. Western grain growers—particularly in Saskatchewan, whose farmers are now carrying more than two-thirds of the total stocks on farm—are feeling the effects of a current cash shortage. Without strong action now, he said, the prospect is for a heavy movement of acreage out of wheat and into coarse grains and oilseeds, since the wheat producer is in a position in which he must increase his cash return. For these other crops, this would result in burdensome surpluses, lower prices, and extreme difficulties for producers dependent upon sales of these products.

Thus, the program is designed both to reduce wheat acreage and to provide a cash incentive for farmers in the Wheat Board designated region (basically, the Prairie Provinces) to hold this land out of production for any crop in 1970.

Compensation payments proposed

Gist of the program, to be administered by Canada's Department of Agriculture at an estimated \$100-million cost, is payment of Federal compensation: at \$6 per acre to producers in the region who cut wheat acreage below 1969 levels and increase summerfallow by the same amount; at \$10 per acre for switching wheat acreage to perennial forage.

Compensation payment will be available for a maximum of 22 million acres of additional summerfallow and 2 million acres of additional perennial forage. For any individual farmer, 1,000 acres will be the maximum amount eligible for compensation. Partial payment will be made before the end

of July and the balance in the fall.

Wheat delivery quotas for 1970-71 will be based on a total of: (1) 25 percent of summerfallow acreage (as stated on the producer's 1969 permit book); total acreage of summerfallow in 1970; and (3) the amount by which acreage in perennial forage in 1970 exceeds that of 1969. In essence, therefore, the wheat quotas will be based on acreage *not* seeded to wheat, in contrast to the practice followed in 1969 and previous years. Quotas for oats, barley, soft spring wheat, and other crops to which delivery quotas apply will be based on acres seeded to each crop in 1970; and any producer may choose to allocate any or all of his acres qualified for wheat quota to any other crop instead of wheat.

International implications

"This major initiative in reducing wheat stocks," Mr. Lang said, "provides a unique opportunity for moving forward toward coordinating global programs of production policies for grain." He reported that he had proposed to the governments of Australia, Argentina, and the United States and to the Commission of the European Community that a meeting be held at the ministerial level to review the Canadian program and to consider complementary action which might be taken by others to compound its benefits internationally.

Commenting on the new Canadian program, U.S. Secretary of Agriculture Clifford M. Hardin said, "I salute our Canadian neighbors for today's announcement which signals clearly their determination to make a gigantic contribution to the solution of the world's wheat surplus problem." Noting that Australia too is increasingly determined to deal directly with its surpluses, Secretary Hardin went on, "It is time for the rest of the world to take comparable action. I think that we as exporting countries are in the strongest position we have ever been in to ask other producing countries, including importers, to take action to curb production."

Capsule Review of Denmark and Its Agriculture

Denmark's intensive, highly efficient agriculture not only supplies the domestic market with most of its principal food needs but also produces a surplus sufficient to make the small Scandinavian country a major food exporter. Although agriculture's contribution to Denmark's economy has been dwarfed by the products of industrialization since the late 1950's production has grown steadily.

Crops. Three-fourths of Denmark's 10.6 million acres of land area is devoted to agriculture. The bulk of agricultural land is used for grain (57 percent) and pasture (29 percent). Root crops and potatoes utilize 10 percent, and seeds and other crops 4 percent.

Danish agriculture is based on a diversified crop production of which 90 percent is used as feed in producing milk, meat (mainly pork), eggs, and other livestock products. Barley is by far the most important feedgrain, utilizing more land area than all other crops combined. The total grain harvest for 1969 was approximately 6,720,000 metric tons.

Livestock. Livestock products account for approximately 90 percent of Danish agricultural sales. Total sales of livestock products and animals in 1968 were valued at \$1.14 billion. Dairy

products, live cattle, hogs, poultry, and eggs are the principal products marketed. The number of hogs increased sharply from 1950 to 1965 and has apparently leveled at around 8 million. The only breed of hog used is the Danish Landrace. The importance of poultry to Danish agriculture is declining—due largely to low exports. Poultry numbers decreased from 26.3 million in 1958 to 18.4 million in 1968.

Family farm foundation of agriculture

Farm size. Danish farms are becoming fewer and larger. Since 1964 the number of small farms (less than 25 acres) decreased by 18,577 and middle-size farms (26 to 150 acres) by 6,603, while large farms have increased by 726. The transitions might be occurring even more quickly were it not for an 86-acre size limitation imposed by the government on farm mergers. However, in certain cases the government will approve holdings of up to 185 acres if the merger will increase efficiency. At the end of 1968 there were 152,708 farms in Denmark averaging 48 acres each in size. In 1967-68 the average net income of farms from 25 to 50 acres was \$2,664, and farms from 50 to 75 acres \$3,000.

Ninety-eight percent of all Danish farms are privately owned and only 5 percent are leased to tenants. About 14 percent of the Danish population live on farms—and as more and more of the rural population migrate to the cities farmers find that labor is becoming increasingly scarce. A farm worker earns about U.S. \$11.60 per day.

Mechanization. Denmark's agricultural efficiency is due partly to a high degree of mechanization. The number of tractors has increased steadily and reached 169,986 in 1968. About 90 percent of the grain is harvested by more than 38,400 combines. Although most of the tractors and combines are imported, Danish tractor manufacturers have expanded both domestic and export sales.

DENMARK'S MAJOR CROPS, 1969

Crop	Area Production	
	1,000 acres	1,000 metric tons
Wheat	242	429
Rye	96	128
Barley	3,221	5,255
Oats	504	765
Mixed grain	143	200
Potatoes	82	592
Fodder sugarbeets	284	5,169
Sugarbeets for feed ...	91	1,572
Sugarbeets for sugar ...	129	1,960

DENMARK: 1968 AGRICULTURAL IMPORTS FROM THE UNITED STATES

Product	Value	
	Thousand dollars	
Oilseeds	43,255	
Tobacco, unmanufactured	16,549	
Fruits and preparations	4,817	
Oil cake and meal, protein meal	4,381	
Vegetables and preparations	1,201	
Cotton, excluding linters	904	
Rice, milled	330	
Nuts and preparations	211	
Other meats, excluding products	156	
Animal fats and oils	108	
Vegetable fats and oils	98	
Feedgrains	72	
Dairy products	27	
Hides and skins	18	
Wheat and flour	16	
Poultry meat	15	
Other	3,111	
Total	75,269	

Country as a Whole — Geography, Population

Denmark, the southernmost of the Scandinavian countries, is almost completely surrounded by water and no point is more than 32 miles from the sea. Jutland, comprising a little more than half of the total land area, has a land frontier of 42 miles where it borders on Germany. The remainder of the country consists entirely of about 500 islands, of which 100 are inhabited. Denmark is a low-lying country with coastal plains; its highest point is 568 feet above sea level.

Denmark lies farther north than the entire continental United States. However, thanks to the warming waters of the Gulf Stream, the country does not have as severe a climate as one might expect to find in this northern latitude. Winter months are less severe than in the other Scandinavian countries and the summers are normally cool.

The weather is an unstable factor in agricultural production, for much of the 20 to 30 inches of annual rainfall occurs too late to benefit the growing season but early enough to adversely affect harvesting.

Denmark has a population of 4.9 million. Only about one-half million Danes live in rural areas while about 1.4 million live in metropolitan Copenhagen. Each year more than 6,000 persons leave the farms and move into the cities.

With a per capita income of about \$2,400 the Danish population enjoys a standard of living which is surpassed by few countries. Food is normally the highest expenditure of the family budget. The Danish high calorie diet which includes eggs, fish, meat, and milk products averages 3,325 calories per day compared with 3,190 per day for the American.

Foreign trade. During 1968 Denmark's agricultural imports were valued at \$140 million and its exports at about \$900 million. The only important agricultural products which must be imported are fruits, tropical products, oilseeds, and oilcakes.

Pork is the most important single livestock product exported, with a large part shipped to the United Kingdom. Butter is the second largest agricultural export also going primarily to the United Kingdom. Large amounts of cheese are exported, mainly to West Germany. Shipments of beef and veal go to West Germany and Italy, and ham, the most important canned product, is shipped mainly to the United States. Poultry is sold to the U.S. Armed Forces in West Germany, and also to Austria, Switzerland, United Kingdom, Japan, and other countries.

Trading partners

The United States is Denmark's fourth largest trading partner after the United Kingdom, West Germany, and Sweden.

In 1968 this trade amounted to \$120.7 million purchased by the United States and \$75.3 million by Denmark.

The United States normally supplies all Denmark's needs for soybean products—(soy meal is a high protein component in Danish animal feeds). Tobacco is the second largest U.S. agricultural export to Denmark. U.S. products also fill a large proportion of Danish requirements for corn, cotton, and various types of fruits and vegetables.

Trade agreements. Denmark is seeking admission to the European Economic Community jointly with the United Kingdom. The Danes have also been discussing the possibilities of a Nordic Common Market (Nordek) but most farm leaders do not believe it to be an acceptable alternative to the EC. Membership in the EC would enable Denmark to regain some of the agricultural export sales to EC countries which were lost after the formation of the EC. Since agricultural products are not included in the European Free Trade Association (EFTA) tariff reductions, Denmark has found its

association with this group to be an advantage for agricultural trade mainly via bilateral agreements—most importantly those with the United Kingdom for pork, butter, and poultry meat.

Cooperatives. Since its beginning in the nineteenth century the cooperative movement in Denmark has had a great influence on the development of agriculture. Cooperative enterprises process 90 percent of the milk and pork, and about 45 percent of broilers, eggs, and slaughter cattle. Cooperatives also handle approximately 15 percent of the retail sales of imported grains and feeds and about 45 percent of the fertilizer.

Despite Denmark's considerable agricultural and industrial exports, in recent years the country has been plagued by an unfavorable balance of payments. One reason for this is the necessity of importing all raw materials for the large manufacturing industry, because of Denmark's almost total lack of natural resources. However, much of this negative trade balance is offset by income from the shipping and tourist industries.

Danish Broiler Prices Down; Consumption Expected To Rise

The Danish home-market scheme for poultry meat which sets domestic broiler prices well above export prices has finally been adjusted. Because the cost of the system to consumers was exceeding the benefits to producers, the scheme was changed so that exports involving losses will be reduced and home consumption increased.

The home-market levy (as of Jan. 1, 1970) was lowered 1.20 kroner/kg, from 18.7 to 12.5 cents per pound (ready-to-cook weight). However, there is speculation that the retail price may drop 1.50 kroner/kg (9.1 cents per pound) or more because of greater turnover and a reduction in value-added tax. Some stores dropped prices as much as 2.00 to 2.50 kroner/kg, 12 to 15 cents per pound, in early sales-promotion campaigns. Even with this drop the consumer is still paying about 55 cents per pound.

The home-market levy system was devised in 1962 to subsidize Danish chicken producers who were being priced out of the world market. Although the scheme was labeled "irrational" it was considered necessary in order to keep Denmark in the broiler-export market. Since nearly 80 percent of Denmark's production—exclusive of farm consumption and

"stable door" selling which bypasses the home-market levy—enters the world market, the export-price quotation provides the basis for setting broiler prices. To subsidize grower prices, a levy is placed on the portion consumed at home because the free market price would be unprofitable. Total producer price during the last week in December 1969, including the export quotation, levy payment, and the grain-fund payment, amounted to 22.1 cents per pound (ready-to-cook weight).

If there were no change in domestic consumption, the loss of proceeds to the levy fund would amount to about 17 million kroner (\$2.3 million) which would translate into a decline in levy payment to producers of about 0.26 kroner/kg, that is, less than 2 cents per pound (ready-to-cook weight). However, it is expected that increased domestic consumption will compensate for this decline to the extent that actual losses in levy revenue to producers will only be half this amount, or less than 1 cent per pound.

An increase of 8,000 metric tons in domestic consumption would be needed to fully offset the loss of revenue, but this is not expected to occur. A small increase in the export price this year would

also help producers' returns.

Consumers are expected to respond rather sharply to the price reduction. Domestic consumption is estimated to increase 15 to 20 percent, although some estimates have run as high as 30 percent. There is room for increased consumption: The Danes are now eating only 9 pounds of chicken per capita, compared with 39 pounds in the United States where chicken has long been a bargain.

The adjustment in the home market scheme will not mean an end to Danish competition in the export market. Chicken production during 1969 is estimated to be up about 5 percent from 1968 and exports—at about 40,000 metric tons—up about 6 percent. The value of chicken exports in 1969 should be about 190 million kroner (\$25.3 million), some 20 million (\$2.67 million) more than in 1968. Production in 1970 has been forecast to be about the same as in 1969.

However, since 15 to 20 percent more chicken is expected to be consumed domestically, exports are expected to be down about 5 percent from 1969.

—Based on dispatch from

HARLAN J. DIRKS

U.S. Agricultural Attaché, Copenhagen

Italians Discuss Lean Meat for Better Health

The U.S. Trade Center in Milan, colorfully decked out with livestock backdrops, models of modern farms and equipment, and live animals, was the setting of a well-attended "Lean Meat for Better Health" livestock promotion held January 19-23.

Italian swine and sheep producers as well as butchers, medical doctors, and nutritionists attended a series of seminars where they engaged in lively discussions, watched slides, and listened to informative presentations. The seminars emphasized the economical benefits producers would derive by adopting proven practices of feeding balanced rations to quality stock.

Live U.S.-bred hogs and lambs were on exhibit at the Trade Center and participants also saw a display of fat and lean carcasses which illustrated the difference between "what is" and "what should be." Visitors had an opportunity to taste tender beef, lean pork, heavy lamb, and also U.S. chicken and turkey products at special luncheons held in the Trade Center.

The livestock promotion was sponsored by the USDA in cooperation with the National Renderers Association, the Institute of American Poultry Industries, and the U.S. Feed Grains Council. Representatives of U.S. Breeders Associations helped to cover the full spectrum of questions and problems that came up at the seminars.



Above, Italian livestock producers discuss the problems of their industry at one of the seminars held during the lean meat promotion at the U.S. Trade Center in Milan. Right, fat and lean carcasses on display in exhibit room illustrate the difference between "what is" and "what should be."



Japanese Get Acquainted With U.S. Beef

A highly successful series of U.S. beef demonstrations and seminars was carried on recently in four leading Japanese cities—Tokyo, Nagoya, Osaka, and Fukuoka. These events were staged in order to develop interest among members of the International Hotel Association in purchasing U.S. beef under a

special quota for international hotels to be announced shortly.

At a "Get Acquainted with American Beef" party held at Tokyo's Imperial Hotel on January 20, USDA Marketing Specialist Kenneth Nuernberg lectured on American beef and showed a film depicting actual production, distribution, and consumption of beef in America. A question-and-answer period followed, and then the more than 200 hotel representatives and members of the food trade sampled U.S. choice and prime beef.

The three U.S. beef suppliers who came from the United States for these events, one from Nebraska and two from Colorado, and the Japanese traders who were present, made on-the-spot sales valued at \$225,000 and are confident they will receive substantial repeat orders. A large Japanese chain store organization has indicated that the promotions have encouraged it to think seriously about handling American beef and caterers have been placing orders for American beef.—Based on dispatch from

ELMER W. HALLOWELL

U.S. Agricultural Attaché, Tokyo

U.S. Ambassador Armin H. Meyer leads Japanese a table tour of U.S. beef.



Philippine Agriculture—Its Progress and Problems

Philippine agriculture during 1969 regained strength after a bout with drought in late 1968 and early 1969 and showed evidence of crop expansion. However, the agricultural situation was also affected by several new import restrictions (see *Foreign Agriculture* Aug. 11, 1969, and Jan 12, 1970) which were implemented by the administration in an effort to improve the steadily worsening imbalance in international trade accounts—preliminary estimates indicate a trade deficit of about \$300 million in 1969. These restrictions, which include the coverage of all imports of \$100 or more by letters of credit, have considerably dampened import prospects for a wide range of industrial and agricultural products. While special material imports will lessen the impact of these restrictions on U.S. exports, it is expected that U.S. sales in 1970 will be down from the previous year by at least 10 percent.

Recovering from drought

Philippine agricultural production in 1969 is preliminarily estimated at 5 percent above the 1968 level. The prolonged drought in late 1968 and early 1969 reduced the potential harvest of most agricultural crops during the first half of the year and continued to limit production of long-period growth crops such as sugar and coconuts throughout the year. Total precipitation in 1968 was 25 percent below the normal level. Prospects for the current year are considerably more optimistic as weather conditions during the last half of 1969 were better than normal in nearly all areas of the country.

Rice• The introduction of new rice varieties had a major influence upon production of this important cereal crop during 1969. Largely as a result of the increased plantings of high-yielding varieties, forecasts place anticipated 1969-70 rice production at 3,347,000 metric tons (milled rice equivalent) up 16 percent from estimated 1968-69 production of 2,885,000 tons. For the first time in nearly a decade, the forecast production will exceed the consumption projection.

Corn• According to unofficial estimates Philippine corn production in 1968-69 fell 10 percent to 1,450,000 tons causing a shortage and forcing prices to new highs. Projections are for a 14-percent rise for the 1969-70 crop.

Coconuts• In 1969, for the third successive year, coconut production declined in the Philippines. Drought slashed production in 1968 and the effects were even more pronounced in 1969. Early estimates of exports of coconut products during 1969 indicate total shipments for the year were 18 percent below 1968.

Sugar• The adverse weather also set back the Philippine sugar expansion effort. Production during 1968-69 was an estimated 1,759,410 short tons, about the same as in 1967-68. As a result, the industry had to draw about 230,000 tons from the 1969-70 crop, which is still being harvested, to meet 1969 export requirements. The sugar industry now places the 1969-70 sugar outturn at 2,105,000 short tons from an area of 336,178 hectares—20 percent more than the 1968-69 estimate of production.

Abaca• The decline in abaca production evident in the past several years slowed down in 1969, but the outlook for this industry is still discouraging. Production in 1969 is pre-

liminarily estimated at 600,000 bales, about the same as in 1968.

Pineapple• The Philippine pineapple canning industry has expanded rapidly with the two major packers reaching near capacity production. The total pack of canned pineapple during crop year 1968-69 is estimated at 160,000 metric tons—a 45 percent increase from the previous year. About 85 percent of the total outturn was exported, with the United States taking 30 percent of the total.

Bananas• While bananas have been an important crop for domestic consumption in the Philippines for many years, with production of about 750,000 tons annually, it was only last year that significant exports got underway. Currently three international banana producers are planting large areas in the Cavendish variety and it is expected that there will be 15,000 hectares planted to this variety within 3 years.

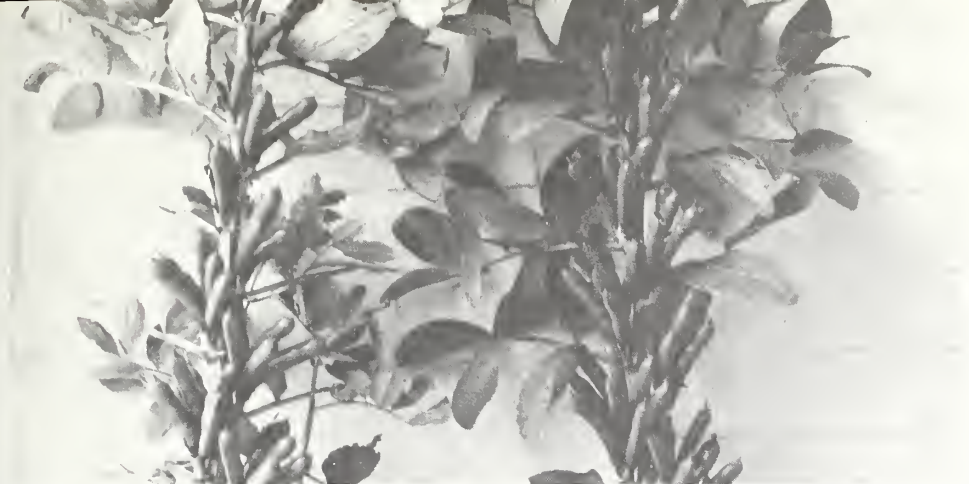
Livestock• The Philippine beef industry continues to grow only at a very modest rate and production gains are being offset by rising demands. The beef import requirement remains substantial. The Philippines is nearly self-sufficient in pork and the outlook is for continued expansion in the coming years. The poultry industry has grown rapidly in recent years to self-sufficiency level and indications are for further substantial growth.

Wheat• Preliminary data indicate wheat and flour imports totaled about 550,000 metric tons in fiscal year 1968-69—11 percent below the record level of 1967-68. The decline was due primarily to drawing from stocks. The U.S. share of the market declined moderately due to increased price competition, particularly from French soft wheat. Prospects for U.S. wheat exports to the Philippines in 1969-70 are not as favorable. Special offers by Canada and Australia threaten to take a large portion of the market, and increased credit and foreign exchange restrictions, along with the prospects of reduced consumer purchasing power, will tend to limit total imports. However, despite these threats, imports may be maintained at reasonable levels and the United States may retain the major share of the market through 3-year credit facilities made available by the Commodity Credit Corporation.

Agricultural trade

In calendar year 1968 Philippine agricultural trade reached record levels with agricultural imports (according to Philippine data) totaling \$156 million (\$78 million from the United States) and agricultural exports totaling \$409 million (including \$285 million shipped to the United States). In 1969 it is believed that both the import and export levels of agricultural commodities were lower. Imports were probably down because of credit and foreign exchange restrictions, a situation which will become more pronounced in 1970. Exports were down mainly because of low copra production and prices. According to U.S. export data, shipments of U.S. agricultural products to the Philippines during the first 11 months of calendar year 1969 were valued at \$73.5 million as compared with \$87.3 million a year earlier.

Based on dispatch from FRED W. TRAEGER
U.S. Agricultural Attaché, Manila



The horsebean, pictured left, is being cultivated in Denmark as a source of protein for animal feed. The horsebean contains 22 percent protein, three times the amount found in Danish barley, and about half the amount in soybeans.

The Horsebean—Denmark's Answer to the Soybean?

In its continuing search for home-produced protein sources for its livestock industry Denmark has turned to the horsebean. Although horsebeans have been known in Denmark for centuries it is only during the last 4 years that Danish agricultural leaders have been making a determined effort to grow them profitably.

The present Danish interest in horsebeans is attributed to several related factors: Denmark has a grain surplus which must be sold on a free market for a price lower than the cost of production; therefore local agriculturists point out that it is financially unsound for Denmark to import expensive protein and produce and sell this surplus grain cheaply. Also experiments to date have shown that horsebeans can, if successfully produced, replace at least part of the protein in animal rations. In addition the horsebean is viewed as potentially valuable for use in the crop rotation system.

Overcoming obstacles to production

The horsebean is regarded as the Danish soybean by P. Hartwig Larsen, Director of Denmark's oldest agricultural college. Under Mr. Larsen's direction an experiment aimed at providing a local source of protein for animal feed began in 1966 on 5 hectares. Previous efforts to grow the plant profitably had failed, principally because of pests—enemy No. 1 being the green fly. Insufficient rainfall during the growing season and too much rainfall at harvesttime also made horsebeans a high-risk crop. When the experiment revealed that spraying with parathion was an effective deterrent to the green fly and new strains showed a higher yield and better resistance to disease, farmers were encouraged to grow the plant commercially. Hectares under horsebean production grew from an estimated 1,000 in 1967 to 8,300 in 1968, and 20,000 in 1969. However, an unusually dry summer in 1969 resulted in unsatisfactory yields in many parts of Denmark and a consequent drop in the planting of horsebeans is expected in 1970. Mr. Larsen views this as only a temporary setback and predicts that horsebeans will find renewed favor when Danish farmers who have been disappointed see the plant under more normal weather conditions.

The horsebean is grown throughout Denmark but shows poorest results in sandy soil. The bean is planted during April; harvested by combine in August or September; then portion dried, milled, and put into a mix. In a typical concentrate, horsebeans are combined with oilcakes, grain, and minerals.

The horsebean contains 22 percent protein (about one-half that in soybean meal); produces three times the amount of protein per hectare that barley does (the major grain grown in Denmark); and produces an amount of carbohydrate energy equal to that provided by barley. The cost of producing a kilogram of horsebeans and a kilogram of barley is about the same. In 1968 the average yield per hectare was 3½ metric tons for horsebeans and 4 tons for barley.

Danish agriculturists experimenting with the horsebean hope that it and other plants indigenous to Denmark will one day provide 15 to 25 percent of Denmark's animal feed protein needs. To achieve this goal 150,000 to 200,000 hectares would have to be cultivated.

U.S. soybean in Denmark

The U.S. soybean industry has been watching the Danish horsebean with interest since Denmark is a major importer of U.S. soybeans, purchasing 384,550 metric tons of beans and 77,819 metric tons of cake and meal during 1968. Although the horsebean may become more important as a component of animal feed in Denmark, the soybean should remain a staple in Danish animal feed for several reasons.

- Horsebeans are best suited for cattle rations—a feed in which little imported soybean meal has traditionally been used. Experiments with cows fed a mixture containing 25-30 percent horsebeans show they give the same milk production as when fed imported protein.

- Soybean meal has been given the stamp of approval by Danish nutritionists as producing the best lean, firm pork—essential for Danish bacon exports. Tests show that horsebeans may be substituted in pig feed, but only in proportions of about 10 to 15 percent of the total ration.

- The possibility of using horsebeans as an ingredient in poultry feed appears to be even more limited. Recent experiments using horsebeans as a replacement for soybean and barley, and soymeal and corn, show that horsebeans may be used profitably in the mixtures in very small quantities but, as the percentage of horsebeans is increased, there is a corresponding increase in feed consumption and a decrease in weight gain.

And perhaps even more important is the fact that horsebeans are a high-risk crop as demonstrated by the poor yield last year.

—ROBERT FEIST

Foreign Market Information Division, FAS



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Weekly Rotterdam Grain Price Report

Current prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago, are as follows:

Item	February 26	Change from previous week	A year ago
	<i>Dol.</i>	<i>Cents</i>	<i>Dol.</i>
	<i>per bu.</i>	<i>per bu.</i>	<i>per bu.</i>
Wheat:			
Canadian No. 2 Manitoba	2.01	+3	2.02
USSR SKS-14	(¹)	(¹)	1.89
Australian Prime Hard	(¹)	(¹)	1.86
U.S. No. 2 Dark Northern Spring:			
14 percent	1.88	-6	1.91
15 percent	1.97	-4	1.94
U.S. No. 2 Hard Winter:			
13.5 percent	1.78	+2	1.84
Argentine	1.76	+2	1.84
U.S. No. 2 Soft Red Winter	1.63	0	1.70
Feedgrains:			
U.S. No. 3 Yellow corn	1.57	+1	1.38
Argentine Plate corn	1.54	-1	1.45
U.S. No. 2 sorghum	1.54	-2	1.36
Argentine-Granifero	1.34	-3	1.23
Soybeans:			
U.S. No. 2 Yellow	3.03	+5	2.90

¹ Not quoted.

Note: All quoted c.i.f. Rotterdam for 30- to 60-day delivery.

World Sugar Supplies Ample

The International Sugar Council will meet in London March 19-25 to consider the world sugar market situation. World production for 1969-70 is expected to exceed consumption requirements by about 2 million tons, resulting in an addition to the already ample stocks. Quotas under the Agreement have been set at 90 percent of the basic amount for 1970. Nevertheless, prices for world sugar have recently been hovering around the minimum price of 3.25 cents per pound.

World sugar production for the 1969-70 crop year is now expected to amount to about 78.5 million short tons, raw value. This is almost 1 million tons less than had been estimated by the Foreign Agricultural Service in November; it would still, however, be a record production. Although production prospects in some countries have improved, outturns in other countries will probably more than offset these increases. The Dominican Republic may produce 1.12 million tons of sugar, compared with an earlier estimate of 950,000 tons. The Philippines is now expected to have a production of 2.1 million tons, compared with the previous estimate of 1.9 million tons. India will probably have a record production; acreage for the 1969-70 season was in-

creased by some 14 percent over the previous year. The production estimate for Cuba for the 1969-70 crop is unchanged from the November estimate of 8 million short tons. Both acreage and average yield were down in the USSR, and the 1969-70 production is now expected to amount to 10 million short tons, compared with a November estimate of 11 million tons.

The EC has a surplus of about 1.1 million tons and may export as much as 800,000 tons on the world market. These ample supplies, as well as surpluses in other producing countries, will lead to a real test of the International Sugar Agreement in 1970.

1969 Tobacco Crop Down in Turkey

The 1969 tobacco crop in Turkey's Aegean region, which produces more than two-thirds of the total Turkish tobacco output, is estimated to be 229 million pounds, compared with 242 million pounds in 1968. The quality of the crop is slightly below 1968's, with about 55 percent A-grade expected.

The Minister of the Turkish Tobacco Monopoly officially opened the Aegean Growers' tobacco market for the 1969 crop on January 26, 1970. During the first week of the market, 203 million pounds of tobacco were sold, representing nearly 90 percent of the total crop. This compares with 196 million pounds or 81 percent of the entire crop sold a year earlier. The Monopoly's purchases during this week represented 62 percent of the total.

The United States is the principal export market for Turkish tobacco. General imports (arrivals) of cigarette leaf and tobacco scrap from Turkey during 1969 totaled 102.5 million pounds, compared with 130.8 million pounds in 1968. These imports represent 44 percent and 50 percent, respectively, of total U.S. tobacco imports for 1969 and 1968.

Australia Raises Tobacco Quota

Australia's Agricultural Council has approved the 1970-71 season tobacco marketing quota of 34 million pounds, following a recommendation by the Australian Tobacco Board. The quota is slightly less than the final 1970 quota of 34.7 million pounds, which was raised from 32 million pounds in November 1969 to compensate for overquota leaf produced last season. The 1970-71 quota does, however, represent an increase of 2 million pounds over the original 1969-70 quota. The 1970-71 quota of 34 million pounds compares with 28.5 million pounds in 1968-69 and 26 million pounds in 1967-68.

During calendar year 1969, Australia was the seventh largest market for U.S. unmanufactured tobacco, taking 20.2 million pounds worth \$19 million. Flue-cured tobacco represented 92 percent of the total.